Dr. Sui-Chung Ng

Proper holomorphic mappings among SU(p,q)-type flag domains on Grassmannians

In this talk, we will look at certain open orbits of the action of SU(p, q) on complex Grassmannians. The orbits (flag domains) that interest us are those containing complex subgrassmannians. We will discuss how the existence of these subgrassmannians can lead to rigidity of proper holomorphic mappings among these domains. There are both local and global results. The local results are more relevant to Cauchy-Riemann geometry, while the global results are more algebro-geometric in nature.